

NAVY PUBLIC WORKS CENTER
DETACHMENT PHILADELPHIA

STANDARD OPERATING PROCEDURE

Ladders

PROCEDURE NUMBER 500.03

DISCLAIMER: These Standard Operating Procedures (SOP) are for the exclusive use of NAVY PUBLIC WORKS CENTER (PWC) NORFOLK DETACHMENT PHILADELPHIA. They are promulgated as guidance for other NAVFAC COMMANDS. If intended to be used by other Activities, they must be tailored to each Activities particular requirement and must be reviewed/approved by the activities Safety Professionals prior to use.

Preparer: _____ (Date)

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Standard Operating Procedure
500.03
Ladders

PURPOSE:

This Standard Operating Procedure will be used for erecting and use of all ladders, portable or stationary, by Code 500 personnel.

BACKGROUND:

Ladders are devices used to reach areas or objects, and provide a safe means of accessing areas not in normal reach. Ladders may be free standing or require an additional supporting surface during use.

PORTABLE LADDERS:

All portable straight ladders [Extension type] shall be equipped with approved non-slipping shoes attached to both feet. Extension ladders should have positive stops to ensure safe overlap of the sections. The overlap needed depends on the total length of all sections measured along side rails.

Ladders up to 32 feet use a three-foot overlap.

Ladders from 32 to 36 feet use a four-foot overlap.

Ladders from 36 to 48 feet use a five-foot overlap.

Ladders over 48 feet use a six-foot overlap

NOTE: The distance from the foot of your ladder to the base of what it is leaning against should be about one fourth of the distance from the ladder's top support to its bottom support.

Set up the ladder with about three feet extending above the working surface.

STEP LADDERS:

Stepladders shall be used only in an open position with the spreader locked in place. The use of stepladders over 20 feet in length is prohibited. The front feet of the ladder shall be equipped with non-slipping shoes. The top of an ordinary stepladder shall not be used as a step.

LADDER ACCESS TO PLATFORMS AND STAGING:

A ladder shall give safe access to every platform or landing they serve and shall be fully secured and arranged so that a person can step directly on or off the platform or landing without crawling under or over the handrails. Landing platforms shall be provided with standard railings 42 inches high, with intermediate rails and six-inch width toe boards so arranged as to give safe access to the ladder. Platforms shall not be less than 24 inches wide. Rails of ladders shall extend at least 36 inches above landing. There shall be no opening between the side rails of the ladders and working platforms in excess of six inches.

GENERAL RULES FOR USING LADDERS:

- 1.** A person shall neither go up or down a ladder without the full use of both hands.
- 2.** Tools or other articles shall not be left on the ladder steps or platforms.
- 3.** Only one person at a time shall mount a ladder.
- 4.** Ladders with split or splintered side rails, broken or missing rungs or steps, or having or structural defects shall be immediately removed from service.
- 5.** Care shall be exercised that ladders are placed and anchored securely. The correct angle setting a ladder is about 75 degrees from the horizontal [the base of the ladder should be a quarter of the working length of the ladder away from the vertical surface supporting the ladder].
- 6.** When working from an extension ladder, when the base or top of the ladder is unsecured, it should be securely tied as required or held by a man standing at its base.
- 7.** Ladders in place shall have a substantial bearing for both rails at the bottom and top. Ladder shall not be placed against a window. A board may be fastened across the top of the ladder to give a bearing on each side of the window frame. All straight ladders shall be tied off while in use.
- 8.** When it is necessary to place a ladder in front of a doorway, the door shall be locked, blocked, or guarded.
- 9.** Ladders shall not be used as substitutes for, or as horizontal members, of scaffolds, or used as a brace, skid, gangway, or any other purposes than for which they were intended.
- 10.** Ladders used on roofs or other high places shall be properly secured.
- 11.** Ladders used in "A high winds" shall be securely lashed in place.
- 12.** Ladders shall never be erected on slippery or uneven surfaces.
- 13.** Workers shall not reach or overextend their bodies beyond the center mass of the ladder. Employees shall be instructed to move the ladder to where the work can be completed without reaching too far to one side. Overreaching causes unbalancing which may result in the ladder tipping and the employee falling.
- 14.** Workers shall never stand on the top three rungs of a straight ladder. Standing on the top step of a stepladder is also prohibited as this can make ladder an unstable platform.
- 15.** Ladders shall be kept free of oil, water, wet paint, and other slippery substances. A rag tied off at bottom of ladder can be used by employees to wipe off oily shoes prior to using ladder.
- 16.** Workers shall not carry objects with their hands while climbing ladders. Small tools or other Objects should be carried in clothing or attached to a belt. Both hands should be kept free for support.
- 17.** Workers shall always face ladder and hold on to the ladder with two hands when ascending or descending.
- 18.** Workers shall use only approved ladders for the job.
- 19.** Defective ladders shall be taken out of service until repaired.
- 20.** Ladders shall be handled carefully when being lowered. They shall not be allowed to drop on their sides or to fall heavily endwise on a rail.
- 21.** Ladders shall not be spliced together to form a longer ladder.

22. Portable metal ladders will not be used when working on electrical circuits.

NOTE:

Ladders will not be used as a substitute for scaffolds. Scaffolds should be erected when an employee has a strenuous action to perform.

CARE, MAINTENANCE AND INSPECTION OF LADDERS:

1. All Code 500 ladders will be under the cognizance of the tool room.
2. All ladders will have a Code 500 Serial number installed on them.
3. The tool room attendant will be responsible for maintaining and inspecting all ladders, under his cognizance by using Code 500 Ladder Inspection Report [**Attached**].
4. Inspection of all ladders will be accomplished quarterly, during the months March, June, September, and December. The ladders will be marked **AVOID after [the last month of the inspection period]**.≡ The following four colors will be used for the periods indicated:

- | | |
|------------|-------------------------------|
| [1] Orange | - January, February, March |
| [2] Yellow | - April, May, June |
| [3] Green | - July, August, September |
| [4] Red | - October, November, December |

5. The tool room attendant will visually inspect ladders for any defects before the ladder is reissued. The visual inspection shall include the condition of side rails, rungs, cleats, hardware, and shoes on ladders.
6. Once inspection is completed, inspection report will be forwarded to Frank Musero, who will maintain a complete inventory on all Code, 500 ladders.
7. Employees should visually inspect their ladder prior to use.
8. Once a ladder is found to be defective it should be reported to the tool room attendant for a replacement ladder. **NOTE:** If the ladder is found to be structurally defective it should be removed from service, and discarded by the tool room attendant who will notify Frank Musero who will remove it from the controlled inventory list.

